STRUCTURE, GROWTH AND EQUITY OF FINANCE COMMISSION TRANSFERS IN INDIA (1990-91 to 2009-10)

By

G. PAVAN KUMAR

Under the Guidance of

Prof. R. SUDARSANA RAO

M.A., Ph.D., PGDES., DIFL.
Dean, Faculty of Arts & Chairman BOS (P.G)
Department of Economics
Andhra University, Visakhapatnam

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Introduction

In any federal system, the division of powers and functions between the centre and the states, though defined constitutionally, has a centripetal bias. The central government devolves a part of its revenue to the state governments, because of vertical fiscal imbalance and distributes the same among the states to reduce the existing horizontal fiscal imbalances to offset fiscal disadvantages of states and to ensure certain minimum levels of specific public services. Hence, the subject of fiscal federalism generates a perennial source of interest in all federations.

Though the Constitution of India has demarcated the jurisdiction and the authority of the Union and the States into exhaustive lists, it is not devoid of the above mentioned centripetal bias. Having realized the built-in vertical imbalances, the framers of the Constitution made a few statutory provisions for the devolution of resources from the Centre to the States. The Finance Commission recommends fiscal transfers to meet the non-plan current budgetary needs of the states. Besides, the existing centripetal bias, the actual operations of the Indian federalism also has increased the degree of centralization. Introduction of the economic development-oriented multi level planning has created complexities in the fiscal arrangements and increased the channels of the central transfers to the states. Hence, one of the serious problems in the scheme of Indian federal system is the existence of multiple channels of transfers. The Planning Commission determines the transfers for State Plan Schemes, while the central ministry makes allocations for the Central sector and the Centrally Sponsored Schemes.

While, multiple channels of fiscal transfers is a severe problem on the one side, absence of a clear framework for distributing central transfers across the States is another. Plan transfers are made on the basis of Gadgil Formula or Modified version of it, while the Finance Commission transfers are based on a set of criteria which are often changed. The Finance Commission transfers include (a) Shared Tax Revenue and (b) Grants-in-Aid. With the 80th

Amendment of the Constitution Act 2000 consequent upon the recommendations of the Tenth Finance Commission, all the central taxes are pooled and shared between the Centre and the States.

The Finance Commissions after the vertical sharing of shared tax revenue distribute these resources across the States on the basis of a criterion. As the main objective of these transfers, besides reducing the vertical fiscal imbalance, is to minimize the horizontal fiscal imbalances, successive Finance Commissions are expected to distribute the resources across the states more progressively. However, the set of criteria not only varied from Commission to Commission and also varied in between taxes. But the objective behind the criteria remained implicit and piecemeal throughout. The letter and spirit of the Indian constitution is such that the Finance Commission plays a major role in the fiscal transfer mechanism with the prime objective being reduction of fiscal imbalances of both the types.

Need for the Present Study

Central assistance to the state governments has grown phenomenally and assumed great significance in the Centre-State financial relations in India. The impact of central assistance mostly depends on the extent and form of federal transfers besides the criteria adopted for their distribution among the Sates. The federal fiscal transfers should reduce fiscal imbalances both vertical and horizontal existing in the federation. They should be equitable in that the relatively poorer states with less capacity and greater needs should get more transfers. While the criteria or formula for Plan transfers is more or less continued over the last few decades of planning, the criteria adopted by successive Finance Commissions have been changing every five years. Moreover, the constitutional makers visualized that the total transfers be made through the Union Finance Commission only. The sharable tax kit has been expanded by the Tenth Finance Commission which has recommended a share from all the central taxes instead of only from Income Tax and Union Excise Duties. Also the Finance Commissions have been recommending Grants-in–aid

under Article 275 for a variety of purposes without confining to Deficit Grants. So all these changes in the scope and working of the Finance Commissions are expected to have an impact on fiscal dependence of the states, vertical and horizontal fiscal imbalances and equlisation among the states. Therefore, there is need to study the structure, scope, growth, criteria and equity of the Finance Commission transfers. A modest attempt has been made to analyse the above issues with the following specific objectives.

Specific Objectives of the Study

The important objectives of the present study are:

1. To examine the fiscal dependence of the states in the Indian federation
2. To measure vertical and horizontal federal fiscal imbalances in India
3. To analyse the trends in growth of fiscal transfers
4. To analyse whether Finance Commission transfers are equalizing and have reduced horizontal fiscal imbalances in India

Hypotheses of the Study

Following are the major hypotheses which are tested in the study

1. Fiscal dependence of states in India has been declining consistently since the Tenth Finance Commission period.
2. Vertical and horizontal federal fiscal imbalances have not been reduced.
3. Fiscal transfers made by Twelfth Finance Commission are more equitable than the Tenth and Eleventh Finance Commission

Methodology

Period of the Study

The present Study pertains to the period 1990-91 to 2009-10 with a focus on the recommendations made by Tenth, Eleventh, and Twelfth Finance Commissions covering the period 1995-96 to 2009-10. The year 1995-96 has been chosen as the bench mark year for implementation of the recommendations of the Tenth Finance Commission which made a historical departure as far as Finance Commission recommendations are concerned.

2009-10 is the year for which accounts figures are available for all fiscal variables. However, the study is preceded by an analysis of growth of total fiscal transfers for this purpose. The period 1990-91 to 2009-10 has been divided into two sub-periods 1990-91 to 1999-00 and 2000-01 to 2009-10.

Sources of Data

The study is based on secondary data. The data and information have been obtained from various Reports of the Union Finance Commission, Budget Documents, Reports on Currency and Finance, Quarterly Bulletin of Reserve Bank of India, Reports of the CMIE, Reserve Bank of India and Statistical Abstracts published by Central Statistical Organization, New Delhi. Data and information have also been accessed through relevant websites.

Data Analysis

The data collected from various sources have been tabulated and analysed. Statistical techniques such as percentages, co-efficient of variation per capita, Exponential Growth Rates, Linear and Log-Linear Regression Analysis have been used to analyse various issues appropriately. Simple statistical tests are used to test the significance levels and accuracy of estimates with regard to various aspects of empirical analysis. Also bar diagrams have been used to present the analysis more effectively and for easy understanding. A detailed methodology followed with regard to both technical and statistical tools are presented in the Annexures.

Methodology in Detail

Fiscal Centralization

Centralization can be looked at either from the revenue side or from the expenditure side. Revenue Centralization measures concentration of revenues at the Central Government. Similarly, expenditure Centralization measures the concentration of expenditure at the Central Government.

The revenue centralization is measured by the ratio of states own revenue to the combined revenues of the centre and states. Similarly

expenditure centralization is measured by the proportion of states' revenue expenditure to the combined revenue expenditures of the centre and states revenue centralization is calculated both before and after transfers of tax devolution and grants. If the ratio of states' own revenue to the combined revenues of the centre and states is high, centralization will be low and vise versa. Likewise, an increase in the proportion of states' revenue accruals to the combined revenues of the centre and states indicates a decline in centralization on revenue side as states have more resources at their disposal. In a similar way a high proportion of states' revenue expenditure to the combined revenue expenditure of the centre and states indicates lower expenditure centralization.

Vertical Fiscal Imbalance

Vertical fiscal imbalance can be measured both by the ratio of states' revenue in combined revenue of centre and states and also by the states' revenue expenditure in the combined revenue expenditure of the centre and sates.

Horizontal Fiscal Imbalance

The ratio of States owns revenue to its total revenue reflects its fiscal capacity to meet its expenditure needs out of its own revenue. This ratio may differ from state to state depending on their level of economic development. The extent of variations in these ratios among different states may be taken as a measure of horizontal fiscal imbalance.

Fiscal Dependence

Fiscal dependence has been calculated by taking the proportion of shared tax revenue and grants in the states' Revenue Expenditure.

Plan of the Study

In the light of the stated objectives, the study has been pursued in six chapters. Chapter one deals with the introduction of the problem, the need for the study, objectives of the study, data sources, period of study and scheme of chapterisation. Chapter Two presents an elaborate review of various issues of Fiscal Federalism while Chapter Three is the Structure and Growth of Fiscal Transfers in India; Chapter Four makes a modest attempt to measure Fiscal Imbalances and Fiscal Dependence of states in India. Analysis of Criteria and Equity of Finance Commission transfers has been made in Chapter Five. Summary of findings and conclusions are presented in Chapter Six.

Federal fiscal transfers to state governments are necessary for reducing vertical and horizontal fiscal imbalances. In India also there exists vertical and horizontal fiscal imbalances and federal transfers have become regular feature of the Indian federation. These are channeled through the Finance Commission, the Planning Commission and the various Ministries of the Central government in the form of Shared Tax Revenue, Grants and Loans.

Federal transfers to the states have increased enormously during the period of our study, 1990-91 to 2009-10. This is true of the total transfers as well as their components. However, various components of theses transfers have increased at different rates and hence the importance of each component is indicated by its percentage share in the total transfers channeled during the period of our study. The Finance Commission transfers have emerged as one of the major sources of transfers.

While the criteria or formula for Plan transfers is more or less continued over the last few decades of planning, the criteria adopted by successive Finance Commissions have been changing every five years. Moreover, the constitutional makers visualized that the total transfers be made through the Union Finance Commission only. The sharable tax kit has been expanded by the Tenth Finance Commission which has recommended a share from all the

central taxes instead of only from Income Tax and Union Excise Duties. Also the Finance Commissions have been recommending Grants-in–Aid under Article 275 for a variety of purposes without confining to Deficit Grants. So all these changes in the scope and working of the Finance Commissions are expected to have an impact on fiscal dependence of the states, vertical and horizontal fiscal imbalances and equlisation among the states. Therefore, there is need to study the structure, scope, growth, criteria and equity of the Finance Commission transfers.

The second chapter deals with various issues relating to the transfer of fiscal resources in the form of shared tax revenue, loans and grants and their relative importance have been discussed. It is concluded that a suitable fiscal adjustment process is necessary in order to reduce horizontal and vertical federal fiscal imbalances, the objectives of horizontal and vertical fiscal imbalances have been discussed. After an analysis of the reasons for fiscal imbalances and various methods of fiscal adjustment, in federations like India, it is opined that no single method is adequate to alleviate fiscal imbalances once for all. What is needed is continuous fiscal transfer mechanism with a rational combination of various fiscal instruments like shared tax revenue and grants-in-aid. It has been concluded that no federation exists without fiscal transparence mechanism and India cannot be an exception.

A descriptive analysis regarding structure of fiscal federalism in India, a detailed empirical analysis to examine the growth and relative importance of different types of fiscal transfers have been presented in chapter-III. An attempt has been made in this chapter to examine the growth of different types of fiscal transfers by estimating exponential growth rates for the study period 1990-91 to 2009-10 and also for the two sub periods 1990-91 to 1999-2000 and 2001-02 to 2009-10. Inter-state comparative analysis of growth rates show that several backward states like Bihar, Orissa, Madhya Pradesh, Rajasthan and Uttar Pradesh obtained growth rates less than that of developed states like Gujarat, Maharashtra and Tamil Nadu.

A detailed analysis regarding fiscal imbalances and fiscal dependence in India during the period (1990-91 to 2009-10) has been made using ratios, percentages and coefficient of variation. It is found that there is no consistent trend in growth of fiscal dependence while the vertical fiscal imbalance has been reduced in recent times. The analysis regarding measuring horizontal fiscal imbalances shows a considerable reduction though they still exist. In view of the limitation to the criteria for inter se distribution of shared tax revenue to achieve the set objective. It is concluded that grants-in-aid need to be applied to reduce horizontal fiscal imbalances.

A critical analysis of fiscal transfers from Center to States as recommended by successive Finance Commissions and the criteria for inter se distribution has been made in chapter-V. Though the analysis covers to the fiscal transfers recommended by successive Finance Commissions from 1990-91 onwards focus has been made on the recommendations made by the last three Finance Commissions-Tenth, Eleventh and Twelfth Finance Commission- covering the period (1995-96 to 2009-10). Besides analyzing the criteria for inter se distribution of Shared Tax Revenue and Grants-in-Aid commission a modest attempt is made to examine whether the Finance Commission transfers have achieved the objective of equity by transferring more resources to the most backward states. Both Linear and Log-linear regression models have been used taking per capita NSDP as explanatory variable (X) and different types of Finance Commission transfers- Share Tax Revenue, Grants and Total Transfers have been used as dependent variable (Y). Based on the empirical results, it has been inferred that over all Finance Commission transfers are progressively distributed upholding the objective of equity. Comparison in between Tenth, Eleventh and Twelfth Finance Commissions shows that the equity element is more in the case of Twelfth Finance Commission transfers compared to that of Tenth and Eleventh Finance Commissions. Important findings based on the study and suggestions are given below:

Major Findings of Study

Fiscal Dependence

- With regard to measuring fiscal dependence, the proportion of shared tax revenue and grants to states' revenue expenditure is above 28 per cent in all the select years implying that more or less one third of the total revenue expenditure consists of these transfers. The fiscal dependence of a state on the centre increases if the share of shared tax revenue and grants to states in the Revenue Expenditure increases. The fiscal dependence of a state decreases if the shared tax revenue and grants to states in the states revenue expenditure declines. The shared tax revenue and grants to states in the revenue expenditure has been increasing over period. However, increase has not been consistent. For instance, the ratio decreased from 37 per cent in the Annual Plan to 36 per cent in the Eighth Plan. However, it fell down to 30 per cent by Ninth Plan. The ratio increased from 36 per cent in Tenth Plan to 42 per cent in the Eleventh Plan period. It may be noted that the dependence of the states on the centre in the Ninth Plan is found to be relatively less compared to Tenth and Eleventh plan periods. This may be due to the unfavorable fiscal situation of the states during 1998-99, 1999-00 and 2000-01. Thus the hypothesis that fiscal dependence of states on the centre in India has been declining consistently is not accepted.

Vertical Fiscal Imbalance

- The coefficient of vertical fiscal imbalance has been estimated both for pre and post-fiscal transfers for the period 1990-91 to 2009-10. It is evident that the coefficient of vertical fiscal imbalance for the pre-fiscal transfers for the chosen period stood at 0.44 in the Annual Plans which has increased to 0.45 in the Eighth Plan and further increased to 0.49 in the Ninth plan which is continued during Tenth Plan period. However, the coefficient has declined to 0.46 during the Eleventh Plan period.

- The coefficient of vertical fiscal imbalance after transfers for the period 1990-91 to 2009-10 has been estimated. The coefficients obtained for different plan periods right from the Annual Plans is around 1.00 indicating non-existence of vertical fiscal imbalance except during the Tenth Plan period for which the coefficient is 0.93. Thus the hypothesis that vertical fiscal imbalances have not been reduced is refuted.

Horizontal Fiscal Imbalances

With regard to estimation of horizontal fiscal imbalances, the coefficient of variation of the ratio of states' own revenue in total revenue of the states was 0.2607 in the Annual Plans which has increased to 0.2747 during the Eighth Plan period. It has declined to 0.2513 in the Ninth Plan which has further declined to 0.2131and 0.02845 in the Tenth Plan and Eleventh Plan periods respectively. The declining size of the coefficients reveals a declining trend of horizontal federal fiscal imbalances, though they still exist in the Indian federation. Thus the hypothesis that horizontal fiscal imbalances have not been reduced is refuted.

Trends in Growth of Fiscal Transfers

- Almost all the states have registered significant growth rates at the 1 per cent level for total fiscal transfers during the study period 1990-91 to 2009-10 and also during the two sub-periods of the study period. It may be observed that the growth rates vary from 3.8 per cent in Punjab to 11 per cent in Karnataka. Andhra Pradesh got a 10.2 per cent growth rate while the All-states growth rate is 10.4 per cent. It may be observed from the growth rates that almost all the backward states like Bihar, Madhya Pradesh, Orissa Rajasthan and Uttar Pradesh obtained growth rates less than the All-States growth rate. Further, it may be noted that only the middle income states like Andhra Pradesh and Karnataka obtained growth rates higher than the All-States growth rate of 10.4 per

cent. The total fiscal transfers for All-states for the first sub period have recorded a growth rate of 10.8 during the period 1990-91 to 2000-01. It is to be noted that backward states like Bihar, Orissa and Uttar Pradesh got growth rates less than the All-states growth rate of 10.8 per cent during the period 1990-91 to 2000-01. The growth rate has increased to 12.8 per cent during the second period 2001-02 to 2009-10, from 10.8 per cent during the first period 1990-91 to 2000-01. During this period almost all the backward states like Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh obtained less growth rates than the All-States growth rate of 12.8 per cent. It is interesting to note that some of the advanced states got higher growth rates than the backward states.

- It may be observed that the backward states like Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh got growth rates less than the All-States growth rate. Further, it may be observed that some of the advanced and relatively advanced states like Gujarat, Karnataka and West Bengal got higher growth rates than some of the backward states implying the need for a thorough change in the criteria by successive Finance Commissions to achieve the objective of horizontal fiscal equalisation. The sub-period analysis of growth rates reveals that some of the advanced and relatively advanced states obtained higher growth rates than the backward states of Bihar, Orissa and Uttar Pradesh (Period-I) and Madhya Pradesh, Orissa, Rajasthan and Uttar Pradesh (Period-II) implying the need for larger share of fiscal resources to the most advanced states.

- In order to analyse the relative importance of different components of fiscal transfers-shared tax revenue, grants-in aid and loans- exponential growth rates have been estimated for the study period and also for the sub-periods. The All-States growth rate for shared tax revenue for the study period is 12.6 per cent while it is 12.7 and 15.4 per cent respectively during I and II periods respectively. It may be observed

that only two states-Bihar and Madhya Pradesh got growth rates less than the All-States growth rate of 12.6 per cent.

- An analysis of growth rates for the sub-periods reveals that only Bihar obtained a growth rate 12.5 per cent less than the All-States growth rate 12.6 per cent during the second period (2001-02 to 2009-10), states like Bihar, Orissa, Rajasthan and Uttar Pradesh got less growth rate than the All-States growth rate of 15.4 per cent during the first period. This implies a larger flow of fiscal transfers to the backward states in the second period compared to the first period (1990-91 to 2000-01). This may be attributed to the progressive criteria adopted by the latter Finance Commissions for the inter-se distribution of the pooled shared tax revenue.

- The exponential growth rates for grants-in-aid for the study period obtained for All-States is 12.4 per cent which is higher than the All-States first sub-period 7.9 per cent and lower than the growth rate of All-States for the second period (16.2 per cent). A perusal of growth rates during the study period shows that almost-all the backward states got growth rates less than the All-States growth rate of 12.4 per cent implying the need for using this instrument more to the advantage of the backward states. More or less the same trend is evident with regard to the first period. In fact the growth rate of states like Gujarat and Haryana are quite higher than that of the growth rate of All-States. Similarly all the backward states except Bihar obtained growth rates less than that of the All-States. The analysis of growth rates of grants-in-aid reveals that this fiscal instrument need to be applied more extensively in the backward states which also helps in reducing the horizontal fiscal imbalances.

- A broad comparison is made to explain the relative importance of shared tax revenues and grants-in-aid. The growth rates of grants-in-aid for All-States are higher than that of the total federal fiscal transfers and loans

for the three periods under the study. Regarding the comparison with shared tax revenue, the growth rates of grants-in-aid have approximated to that of tax-shares during 1990-91 to 2009-10. Grants-in-aid have registered a higher growth rate than that of tax-shares during the period 2001-02 to 2009-10. All-this shows the important role that grants-in-aid have been playing in the federal fiscal transfers in India.

5) Finance Commission Transfers and Equity

- The regression results show that the shared tax revenue is progressively distributed as the coefficient of per capita NSDP is negative and statistically significant in all the three Finance Commission periods. The devolution of shared tax revenue is progressive and in fact equitable during the three Finance Commission periods largely due to the criteria adopted for inter-se distribution of shared tax revenue.
- With regard to Grants-in-Aid of revenues under Article 275 of the Constitution recommended by the Finance Commissions, the coefficient of Per Capita NSDP in the three Finance Commission periods is negative. However, the coefficient is not statically significant during the three Finance Commission periods. So no definite conclusion can be arrived at regarding the distribution of grants-in-aid during these Finance Commission periods except that they are not equitably distributed. Therefore, there is a need to award grants-in-aid considering the net fiscal needs of the states.
- Regarding the per capita total Finance Commission transfers, the coefficient of Per Capita NSDP is negative in the three Finance Commission periods. This indicates a progressive bias in the transfers. Further, the coefficient is statically significant in the three Finance Commission periods. This shows that the Finance Commission transfers are equitable corresponding to the periods covered by 10^{th}, 11^{th} and 12^{th} Finance Commissions. However, notwithstanding the overall equitable

distribution of Finance Commission transfers, especially compared to the earlier Finance Commissions, it is necessary to use grants-in-aid as balancing fiscal instrument to enhance further the element of equity in the Indian federation. The following suggestions have been made in view of the existing horizontal fiscal imbalances, methodology adopted, recommendations and working of the successive Finance Commissions which may help the Finance Commissions to achieve its objectives.

Suggestions

- According to Article 280 of the Constitution the Finance Commission is expected to take into account the total budgetary needs of a state government. But the successive Finance Commissions with a few exceptions, have been assessing the budgetary needs of state governments only of the Non-Plan Revenue Account of the Budget. Therefore, it is suggested that the Finance Commission needs to take into account the 'Net Fiscal Needs' of the state governments on the lines of the Commonwealth Grants Commission of Australia.
- In order to assess the net fiscal needs of state governments, the Finance Commission needs to function uninterruptedly. This necessitates making the Finance Commission a permanent statutory body and taking the responsibility of devolving the total resources confining the Planning Commission to formulate and evaluate the plan programmes.
- Compared to the earlier Finance Commissions, the Twelfth Finance Commission adopted a criteria for inter se distribution of shared tax revenue injecting a higher element of eqalisation. However, still the horizontal fiscal imbalances are existing. Therefore, a more progressive criteria needs to be adopted by reducing the weightages given to economic development-neutral factors like population and geographical area.

- Grants for financing relief expenditure that arise due to natural calamities are being given by fixing the margins considering the average expenditure of a state of this type of expenditure. This methodology needs to be changed by taking into account some factors indicating the proneness for natural calamities of a state. States which have not experienced any natural calamity in the preceding five years will also be benefited by such a change in the methodology.
- The scope of Grants-in-aid under Article 275 needs to be expanded and they need to be applied in the states they are most needed-the most backward states by suitably designing these grants incentivizing them to provide a minimum national standard of essential social and administrative services.
- Article 275 grant-in-aid need to be awarded by following a methodology that helps in reducing the horizontal fiscal imbalances
- The upper ceiling on the total fiscal transfers imposed by the Eleventh and Twelfth Finance Commissions may be further enhanced in the case of backward states like Bihar, Orissa, Madhya Pradesh, Rajasthan and Uttar Pradesh.
- The successive Finance Commissions have been using population data of 1971 Census in all its criteria for devolving funds to the states. As a result some of the states are put to disadvantage in their share of pooled tax revenue and grants-in-aid. So it may be suggested that the Finance Commission use that population data of the preceding Census and recommend grants-in-aid to make good the loss of the revenue to the concerned states